

BEFORE THE
POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

IN THE MATTER OF
SCOTT PAPER COMPANY,

Appellant,

V.

STATE OF WASHINGTON,
DEPARTMENT OF ECOLOGY,

Respondent.

PCHB Nos. 81-10 and 81-21

FINAL FINDINGS OF FACT,
CONCLUSIONS OF LAW
AND ORDER

These matters, the consolidated appeals from the issuance of two civil penalties for the alleged violation of chapter 173-410 WAC, came before the Pollution Control Hearings Board, David Akana (presiding) and Gayle Rothrock, at a formal hearing in Lacey on May 18 and June 30, 1981.

Appellant Scott Paper Company was represented by its attorney, Julian C. Dewell; respondent Department of Ecology was represented by Wick Dufford, Assistant Attorney General. Court reporters Lois Fairfield and Marilyn Mitchell recorded the proceedings.

1 Having heard the testimony, having examined the exhibits, and
2 having considered the contentions of the parties, the Board makes these

3 FINDINGS OF FACT

4 I

5 Appellant Scott Paper Company owns and operates a sulfite pulping
6 mill in Everett, Washington. The facility includes a recovery boiler
7 which is fueled by spent sulfite liquor (SSL), a byproduct from the
8 pulping of wood chips in digesters. Heat from the boiler exhaust
9 gases is recovered in a cooling tower. The gas is passed through an
10 absorption tower where sulfur dioxide (SO_2) is removed and the gas
11 further cooled. At this point, the gas is fully saturated with water
12 and has a temperature of about 85 degrees Fahrenheit(F). The gas then
13 enters two demister units which remove particulate matter and some
14 moisture from the gas stream. After leaving the demisters, the gas,
15 saturated with water, passes by an opacity monitor then is ducted into
16 a 200 foot high exhaust stack and discharged into the atmosphere.

17 II

18 The demister section is comprised of three units, two of which are
19 on-line while the third unit is cleaned. Each demister contains 33
20 cylindrical fiberglass plastic elements. Each element is about 18 feet
21 long and 2 feet in diameter and placed vertically in the demister.

22 III

23 The monitor recorded opacity readings exceeding 35 percent on
24 August 4, 6, 20, 23, 24, September 8 through 18 and on October 12,
25 1980. A total of 150 exceedences was counted. These exceedences were

1 the basis for the issuance of civil penalties relating to opacity
2 violations in Docket Nos. DE 80-703 and 81-111.

3 IV

4 Sulfur dioxide emissions exceeded the 300 parts per million (ppm)
5 hourly standard on August 6 and 20, and November 2, 3, 17 and 20,
6 1980. A total of thirteen exceedences was counted. Civil penalties
7 were issued for each event in Docket Nos. DE 80-703 and 81-111.

8 V

9 The recorded violations on September 8 and 18 (2 for opacity), and
10 November 2 and 17 (4 for SO₂) are conceded or not contested. Civil
11 penalties associated with each of the violations total \$1050.

12 VI

13 The following recorded violations were caused by the unavoidable,
14 unexpected and unforeseen failure of equipment: August 4 - opacity
15 (broker demister box damper handle), August 6 - SO₂ (acid tank
16 storage level indicator failure), August 6 - opacity (related to same
17 SO₂ violation), August 20 - SO₂ (check valve plug failure on
18 digester), August 20 - opacity (related to same SO₂ violation),
19 August 23 and 24 - opacity (gasket failure on digester), November 2 -
20 SO₂ (vat level control valve failure), and November 20 - SO₂
21 (pressure relief valve failure). Scott reported the upsets by
22 telephone and written report. Respondent views the various
23 operational and equipment malfunctions as a chronic problem which are
24 not "unavoidable" within the meaning of WAC 173-410-067.

VII

Scott has experienced isolated failures of the fiberglass elements over the past five years. There was a failure of one element in November, 1979. In April 1980, deterioration was observed in the elements of one demister unit. A replacement set of elements corrected the problem. In September, 1980 another failure occurred.

The recorded violations on September 9, 1980 were caused by the unexpected and unforeseen failure of five fiberglass plastic elements in one demister box. Although the opacity exceeded the monitor scale of 40% on that day, the unit continued to be operated until clearing on September 11. The unit was returned to service on September 12-14, cleaned, then again returned to service on September 15-17. Opacity readings continued to exceed the 35% monitor standard when the unit was operating. On September 17, the unit was inspected and five fiberglass elements were found defective. Scott began to investigate the cause of the fiberglass failure.

The cause of the failures was discovered to be the presence of a fluoride ion contaminant in the sulfuric acid used in the process which caused the filters to gradually deteriorate. The cause was confirmed to Scott by the fiberglass element supplier in a March 1981 letter. There was no reason for Scott to suspect the cause of the failure. However, Scott knew or should have known that the subject demister was not operating properly by the second day of operation, September 10.

VIII

The subject demister was otherwise maintained and operated in a reasonable manner. The emission exceedences did not result from inadequate design, operation, or maintenance of the facility, but from an unsuspected element in supposedly pure sulfuric acid. However, after Scott knew or should have known of the emission exceedences, repairs or corrections were not expeditiously made.

IX

Particulate emissions from Scott's recovery system are well within the state standards for the facility in question.

X

Any Conclusion of Law which should be deemed a Finding of Fact is hereby adopted as such.

From these Findings the Board comes to these

CONCLUSIONS OF LAW

I

The Board has jurisdiction over the persons and subject matter of this proceeding.

II

WAC 173-410-040(7), as filed on August 20, 1980 and effective 30 days thereafter (WSR 80-11-061), is substantially similar to WAC 173-410-036.¹ Appellant would suffer no undue prejudice from the

1. There is a substantial difference in the meaning of "opacity" between the new regulation (WAC 173-410-021(22)) and the old regulation (WAC 173-410-021(14)). The old definition excludes uncombined water; the new definition includes any matter which would obscure an object. Opacity, as used in the instant matters, appears to be from the new regulation.

use of either standard on any of the opacity events. The provision used by the parties is WAC 173-410-040 which provides in part:

(7) Opacity. No person shall cause or allow the emission of a plume from a recovery system or acid plant or other source which has an average opacity greater than thirty-five percent at or within a reasonable distance of the emission point, for more than six consecutive minutes in any sixty minute period, except as described in WAC 173-410-040(8) and 173-410-040(9). The opacity determination shall be according to procedures contained in "Source Test Manual - Procedures for Compliance Testing", on file with the department. There shall be no more than one violation for any sixty minute period.

(8) The provisions of WAC 173-410-040(7) shall not apply when the presence of condensed water droplets is the only reason for the opacity of the plume to exceed thirty-five percent.

A major issue in the case is whether water droplets caused the opacity monitor to record a higher opacity than what would have been correct. To prove a violation of WAC 173-410-040(7), respondent must show that a plume was emitted which had an average opacity of more than 35 percent at or within a reasonable distance of the emission point for more than six consecutive minutes using procedures on file with the department. The evidence presented does not show that the opacity monitor would record a violation in a manner described in the department regulation. For this reason, the alleged opacity violations and civil penalties assessed therefor should be reversed. Moreover, the regulation is also not applicable when the presence of condensed water droplets is the only reason for the opacity of the plume to exceed 35 percent. The evidence presented shows that the monitor recorded opacity readings which included a substantial presence of condensed water. However, it

1 was not shown that the only reason for the opacity to exceed 35
2 percent was the presence of condensed water droplets during the period
3 of September 9 through 17, 1980, when the demister was not working
4 properly. The evidence shows that on other occasions, it was more
5 likely than not that the only reason for the recorded opacity to
6 exceed 35 percent was the presence of condensed water droplets at the
7 monitor. For this additional reason, the alleged opacity violations
8 occurring on these other occasions should be reversed. Lastly, those
9 alleged violations occurring on August 4, 6, 20, 23, and 24 were
10 excusable under the provisions of WAC 173-410-067. (See Finding of
11 Fact VI.)

12 III

13 WAC 173-410-040(1)(e), as filed on August 20, 1980 and effective
14 30 days thereafter (WSR 80-11-061), is substantially similar to the
15 standard authorized by WAC 173-410-041 and regulatory order DE 78-106
16 (February 27, 1978). Appellant would suffer no undue prejudice from
17 the use of either standard on any of the alleged SO₂ events. The
18 provision used by the parties is WAC 173-410-040(1)(e) which provides:

19 Emissions from recovery systems constructed after
20 January 24, 1972, shall not exceed 300 ppm (dry) of
sulfur dioxide for any hourly average.

21 Respondent showed that a violation of the standard occurred on the
22 dates and times alleged. Appellant contends that upset conditions at
23 the facility caused the emissions to exceed the SO₂ hourly
24 standard. Appellant reported each incident, furnished written
25 details, and took remedial steps to minimize the emissions as outlined

1 in WAC 173-410-067(2). The parties differ as to whether the incidents
2 were "unavoidable" as defined in WAC 173-410-067(5). We conclude that
3 the contested incidents relating to SO₂ emissions were unavoidable.
4 See Finding of Fact VI. Accordingly the incidents were excusable and
5 the civil penalties issued therefor should be reversed.

6 IV

7 Those civil penalties issued on September 8 and 18 (DE 80-703) and
8 November 2 and 17 (DE 81-111) are affirmed.

9 V

10 Appellant's contention relating to its requested change in opacity
11 limit is not susceptible to determination in this proceeding.

12 VI

13 Appellant's remaining contentions were withdrawn or are without
14 merit.

15 VII

16 Any Finding of Fact which should be deemed a Conclusion of Law is
17 hereby adopted as such.

18 From these Conclusions the Board enters this

ORDER

1. The civil penalties issued to Scott Paper Company for the violation of WAC 173-410-040(1)(e), four in Docket DE 80-703 and five in Docket 81-111 are reversed.

2. The civil penalties issued in Scott Paper Company for the violation of WAC 173-410-040(7), 147 in Docket DE 80-703, and one in Docket DE 81-111, are reversed.

3. The civil penalties issued for violations on September 8 and 18 in Docket DE 80-703 and November 2 and 17 in Docket DE 81-111 totalling \$1050 are affirmed.

DONE this 9th day of October, 1981.

POLLUTION CONTROL HEARINGS BOARD

David Akana

DAVID AKANA, Member

Gayle Rothrock

GAYLE ROTHROCK, Member

Did Not Participate

NAT W. WASHINGTON, Chairman